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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,044	02/09/2004	Boris Vasilyevich Rozynov	11816.51USD2	2120

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Attention of Mark DiPietro
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EXAMINER	
DICUS, TAMRA	
ART UNIT	**PAPER NUMBER**
1774	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/776,044	ROZYNOV ET AL.	
	Examiner	Art Unit	
	Tamra L. Dicus	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,10-19,33,34,36,37,44 and 45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-19,33,34,36,37,44 and 45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The cancellation of claims 9, 20-32, 35 and 46-56 are acknowledged. The objections and 112 rejections are withdrawn due to Applicant's amendments. The Applicant's arguments are persuasive and the prior 103 rejections are withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8, and 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitation "the printing process". There is insufficient antecedent basis for this limitation in the claim. Further the claim is unclear as "a printable layer" is not a positive recitation.

4. Claim 1 recites the limitation "a reactive composition capable of reacting with a volatile organic carbonyl compound...to reduce release of the carbonyl compound from the packaging material". It is not clear where the reactive composition is, which layer is it located? Further there is no recitation of a volatile organic carbonyl compound with respect to the packaging material. How is the reactive composition deposited and where?

5. Claim 18 recites the limitation "the packaging layer". There is insufficient antecedent basis for this limitation in the claim. Further, this limitation makes the claim unclear as to which layer comprises paper.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-8, 17-19, 33-34, 36-37, and 44-45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of USPN 5,985,772 to Wood et al. in view of USPN 5,382,282 to Pennaz.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a packaging, whereas the patented claims, containing the same structural layers and ingredients, are directed to a nonwoven web of paperboard. However, despite this difference, because the same materials are employed, the paperboard is a functional equivalent to a packaging. An additional difference is to the recitation of a residue from a printing process. While the Wood patent claims printing ink from a printing process (all patented claims), Wood does not necessarily disclose a "residue from a printing process"(instant claim 1), or a residue from a printing process having volatile organic compounds arising from both ink residue and a fountain solution (instant claims 4 and 5).

However, Pennaz teaches ink and fountain solution used in lithographic printing or other printing processes form a residue, concerned in reduction of volatile compounds and printing on

paper print stock, resulting in acceptable print quality (col. 3, line 25-68; col. 5, lines 20-30; col. 7, lines 4-45; col. 30, lines 49-55; col. 38, lines 49-60 and Example 38).

It would have been obvious to one of ordinary skill in the art to have modified the packaging of Wood to have a residue from a printing process having volatile organic compounds arising from both ink residue and a fountain solution because Pennaz teaches a printing process such as lithography that produces ink residue and fountain solutions printed on paper print stock results in acceptable print quality (col. 3, line 25-68; col. 5, lines 20-30; col. 7, lines 4-45; col. 30, lines 49-55; col. 38, lines 49-60 and Example 38).

Regarding claims 17, 18, and 33, Wood does not teach the exterior acrylic layer has a thickness of 2 to 35 microns or the printable clay layer thickness from 10 to 100 micronmeters. However, it would have been obvious to one of ordinary skill in the art to produce a thickness as recited, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. Thickness effects the strength.

Further regarding claims 18 and 33, Wood teaches ink on and into the inherently porous clay in an amount of 0.5 to 1 lbs-1000 ft^-2 add-on, and Pennaz teaches employing both ink and ink from a fountain solution, but does not teach said inks in the ink layer distributed in an amount of 0.5 to 6 grams ink per square meter or 25 to 4000 milligrams of solution per square meter, however, it would have been obvious to one having ordinary skill in the art to provide the recited amount because the amount of ink delivered is an optimizable feature as the amount of ink effects the coverage area and overall printed image design (Wood, col. 5, lines 54-55). It has

been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

Regarding claims 19, 34, and 45, Wood teaches volatile organic compounds but does not teach the volatile compound is C_5-C_9 aldehyde or mixture thereof.

Pennaz teaches volatile compound of volatile petroleum, volatile petroleum, by definition embraces C_5-C_9 aldehyde or mixture thereof (col. 7, lines 15-18).

It would have been obvious to one of ordinary skill in the art to have modified the packaging of Wood to include a volatile organic compound of C_5-C_9 aldehyde or mixture thereof because Pennaz teaches volatile compound of volatile petroleum arising from ink or fountain solutions such as volatile petroleum which by definition embraces C_5-C_9 aldehyde or mixture thereof used in print stock (col. 7, lines 5-28 and Example 38 of Pennaz).

Claims 1-8, 17-19, 33-34, 36-37, and 44-45 are directed to an invention not patentably distinct from claims 1-44 of commonly assigned patent.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned patent, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-8, 17-19, 33-34, 36-37, and 44-45 are rejected under 35 U.S.C. 103(a) as being obvious over USPN 5,985,772 to Wood et al. in view of USPN 5,382,282 to Pennaz.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in

accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

11. Regarding claims 1 and 33, Wood teaches a printed, reduced odor packaging material having an interior surface and an exterior surface, the packaging material comprising:

(a) a substrate layer having a uniform thickness (Wood, 240, FIG. 2 and associated text);

(b) a printable layer formed on the exterior of the substrate layer, the printable layer comprising ink from a printing process (Wood, 220, FIG. 2 and associated text, "printed layer comprising ink") and a printable clay layer (Wood, 230, FIG. 2 and associated text), and

(c) a reactive composition, to substantially reduce release of the carbonyl compound from the packaging material (Wood, col. 1, line 19-35; col. 4, lines 45-50, lines 60-65, "an active material or component" such as a "cyclodextrin compound").

Regarding claim 2, Wood teaches wherein the substrate comprises a paper or paperboard substrate layer and the printable layer comprises a clay layer (Wood, 240, FIG. 2 and associated text). Regarding claim 3, Wood teaches wherein the reactive composition is formed in a layer exterior to the paper or paperboard layer (col. 13, lines 30-60). Regarding claims 6-7, 18, and 36-37, Wood teaches paper or paperboard with a thickness range of 50 to 1200 μm (col. 8, lines 45-50, 250 to 1000 mm is within Applicant's range). Regarding claims 8 and 44, Wood teaches an exterior acrylic layer (Wood, 210, FIG. 2 and associated text).

As aforementioned, while Wood teaches printing chemicals and ink from a printing process (col. 1, lines 23-30 and col. 13, lines 30-60), Wood does not necessarily disclose a "residue from a printing process"(claim 1), or the reactive composition's capability (e.g. capable

of reacting with a volatile organic carbonyl compound arising from a residue), or a residue from a printing process having volatile organic compounds arising from both ink residue and a fountain solution (claims 4 and 5).

However, Pennaz teaches ink and fountain solution used in lithographic printing or other printing processes form a reside, concerned in reduction of volatile compounds and printing on paper print stock, resulting in acceptable print quality (col. 3, line 25-68; col. 5, lines 20-30; col. 7, lines 4-45; col. 30, lines 49-55; col. 38, lines 49-60 and Example 38).

It would have been obvious to one of ordinary skill in the art to have modified the packaging of Wood to have a residue from a printing process having volatile organic compounds arising from both ink residue and a fountain solution because Pennaz teaches a printing process such as lithography that produces ink residue and fountain solutions printed on paper print stock results in acceptable print quality (col. 3, line 25-68; col. 5, lines 20-30; col. 7, lines 4-45; col. 30, lines 49-55; col. 38, lines 49-60 and Example 38). Further it is obvious the reactive composition is capable of reacting with a volatile organic carbonyl compound arising from a residue as the composition disclosed by the prior art is the same.

Regarding claims 17, 18, and 33, Wood does not teach the exterior acrylic layer has a thickness of 2 to 35 microns or the printable clay layer thickness from 10 to 100 micronmeters. However, it would have been obvious to one of ordinary skill in the art to produce a thickness of 2 to 35 microns, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272. Thickness effects the strength.

Further regarding claims 18 and 33, Wood teaches ink on and into the inherently porous clay in an amount of 0.5 to 1 lbs-1000 ft^-2 add-on, and Pennaz teaches employing both ink and ink from a fountain solution, but does not teach said inks in the ink layer distributed in an amount of 0.5 to 6 grams ink per square meter or 25 to 4000 milligrams of solution per square meter, however, it would have been obvious to one having ordinary skill in the art to provide the recited amount because the amount of ink delivered is an optimizable feature as the amount of ink effects the coverage area and overall printed image design (Wood, col. 5, lines 54-55). It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272.

Regarding claims 19, 34, and 45, both Wood and Pennaz teach volatile compounds but does not specifically teach the volatile compound (VOCs) is C_5-C_9 aldehyde or mixture thereof.

However, it would have been obvious to one of ordinary skill in the art to have modified the combination to include a volatile organic compound of C_5-C_9 aldehyde or mixture thereof because the prior art teaches VOCs and the instant recitation is generic and is a species thereof.

Allowable Subject Matter

12. Claims 10-16 and 38-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Response to Arguments

13. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamra L. Dicus
Examiner
Art Unit 1774

05/24/05

RENA DYE
SUPERVISORY PATENT EXAMINER
A.U. 1774 5/26/05